

## **ABSTRACT**

### **THE INFLUENCE OF ACTIVE STUDENT IN ROBOTIC STUDY CLUB, MOTIVATION, AND LEARNING ATTITUDE ON THE ACHIEVEMENT MICROCONTROLLER SUBJECT OF SMK N 3 YOGYAKARTA**

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The purpose of this research thesis is to determine the effect of active student in robotic study club, learning motivation and learning attitude on the achievement Microcontroller subject, either simultaneously or partially, at the SMK N 3 Yogyakarta.

The study used survey research methods with quantitative approaches. The study conducted in the scope of the SMK N 3 Yogyakarta, with the object of study is limited only to the variables of active student in robotic study club (X1), learning motivation (X2), and learning attitude (X3) as an independent variable and the learning achievement in Microcontroller subject (Y) as the dependent variable. Samples were taken as much as 100% of the total population, which are 46 respondents.

The results of the study have shown that the active student in robotic variable significantly influence the learning achievement in Microcontroller subject at the SMK N 3 Yogyakarta. Motivation variable also significantly influence on the learning achievement in Microcontroller subject at the SMK N 3 Yogyakarta. And, learning attitude variable also significantly influence on the learning achievement in Microcontroller subject at the SMK N 3 Yogyakarta. Variable that has the most significant influence on the learning achievement in Microcontroller subject at SMK N 3 Yogyakarta is the active student in robotic. Active student in robotic study club, motivation, and learning attitude found to have a significant effect on the learning achievement in Microcontroller subject at SMK N 3 Yogyakarta. Active student in robotic study club, motivation, and learning attitude variables could explain the changes in the learning achievement in Microcontroller subject for 38.8% and the balance of 61.2% is explained by other variables which did not included in the this research.

**Key word :** active student, motivation, attitude, achievement, robotic, microcontroller